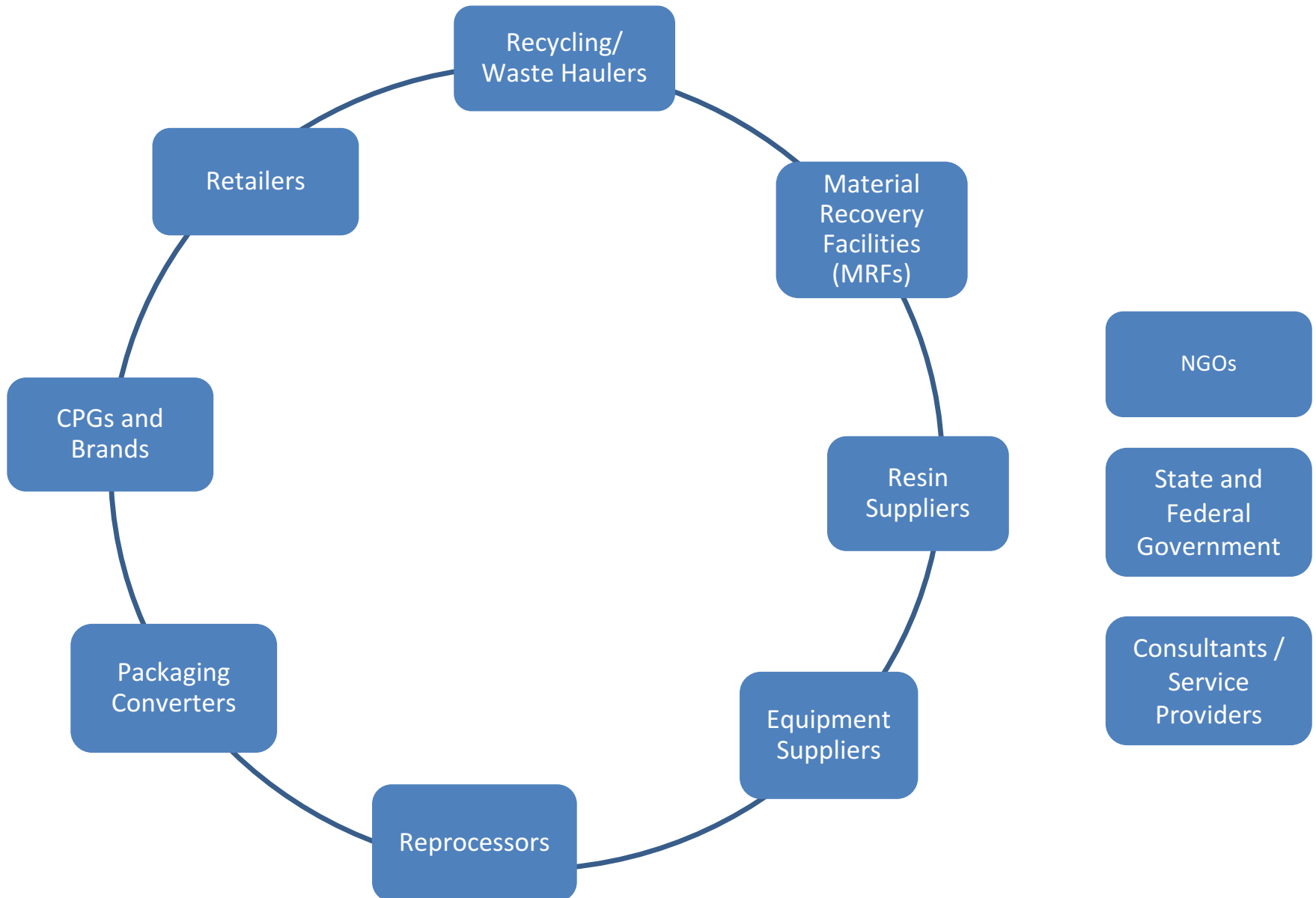


# End Markets Value Chain



# Material Recovery Facilities (MRFs)

*Make quality bales*

- Invest in technology to sort complex plastics.
- In the case of film, to sort different kinds of films from other films, i.e. LD from HD bales.
- Example technologies include: NIR sorters, film grabbers, density-based air separators, ballistic separators.

# Resin suppliers

*Make material market ready*

- Conduct research and development projects to make recycled grades as high performing as virgin grades (i.e. thermal stability tests, degradation studies, etc.)
- Invest in compatibilizer technologies
- Invest in other additives - antioxidants, tracers, etc.

# Equipment suppliers

*Make material market ready*

- Invest in Filtration equipment - inclusion reduction
- Invest in Compounding equipment - gel reduction
- Invest in Devolitizing equipment - measurements of what is coming off

# Reprocessors

## *Invest in Continuous Improvement*

- Invest in improved processing technology (venting, filtration, additives, devoluitizing)
- Provide source transparency (high level)
- Communicate and collaborate with MRFs on quality needs

# Converters

## *Test material for new markets*

- Invest in the development of packaging that supports circularity
- Test recycled content and see how performs – try different percentages of recycled materials, talk with leading reprocessors like UltraPoly, Avangard, others
- Help vet the supply chain (GMP, process mapping, etc.)
- Invest in necessary equipment
- Help search for additional customers/end markets

# Brands & Retailers

*Incorporate recycled content in products & operations*

- Look for ways to use recycled content in your brands
  - Be specific (i.e. how much you want in, what the source should be, etc.) - clear vision of the "goal" will get us there faster
  - Consider what are you willing to change (performance specs, appearance, costs) - where is there room to be flexible?
- Help search for more end markets in your supply chain, use global leverage
- Align your goals with recycled content end markets
- Leverage connection to consumers to understand where they are and what they are looking for
- Get reporting and information flow with suppliers
- Share learnings with industry peers

# NGOs and Others

## *Promote Action & Help industry*

- Utilize data to drive action. Pictures elicit an emotional response (sometimes necessary), data directs that response into impactful change.
- Challenge the value chain to not accept the status quo and to continuously improve.
- Engage the capitalists to bring innovations that can survive a competitive global marketplace.
- Be specific about the details of policy, avoid use of the phrase "common sense" in presentations to industry.



# Everyone

- Admit that there is a problem with the current state
- Use Metrics, S.M.A.R.T. goals, & track your progress
- Embrace the value of packaging and need for better end of life options
- Support / join industry initiatives (SPC, APR, The Recycling Partnership, WRAP, MRFF etc.)

